

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended): An optical transmission apparatus, comprising:
a plurality of ports for transmitting and/or receiving one or more signals substantially as defined at IEEE 1394;
at least one of the ports being for transmitting and/or receiving one or more optical signals;
and
one or more protocol conversion means for carrying out signal transmission protocol conversion at a physical-layer level on at least one of the optical signals transmitted and/or received by said at least one of the ports; and
~~wherein~~ one or more bus management means ~~co-manages~~ for co-managing one or more signal buses which are respectively connected externally to at least a portion of the plurality of ports, wherein
said one or more protocol conversion means is an application-level protocol conversion means which carries out mutual conversion between two formats of signal transmission protocols at an application level, and
respective signals according to the two formats of signal transmission protocols mutually converted by the application-level protocol conversion means are assigned together to a series of packets, and the respective signals are transmitted simultaneously in said packets.

Claim 2 (Canceled)

3. (Currently Amended): The optical transmission apparatus according to claim ~~2~~ 1 wherein at least one of the application-level protocol conversion means carries out conversion between or among one or more DV-format signal transmission protocols and one or more MPEG-2TS-format signal transmission protocols.

4. (Currently Amended): The optical transmission apparatus according to claim ~~2~~ 1 wherein at least one of the application-level protocol conversion means carries out conversion between or among one or more 1-bit audio signal transmission protocols and one or more multi-bit audio signal transmission protocols.

5. (Currently Amended): The optical transmission apparatus according to claim 4 wherein at least one of the multi-bit audio signal transmission protocol or protocols is substantially as defined at IEC 60958.

6. (Currently Amended): The optical transmission apparatus according to claim 4 wherein at least one of the multi-bit audio signal transmission protocol or protocols is substantially as defined at MPEG Audio Layer-3.

7. (Currently Amended): The optical transmission apparatus according to claim ~~2~~ 1 wherein

one or more of the application-level protocol conversion means take the form of one or more replaceable modules.

8. (Currently Amended): Electronic equipment comprising one or more optical transmission apparatuses according to any of claims 1 ~~through 7~~ and 3-7.